

Sleep disorders (insomnia, hypersomnia, parasomnia)

Mechanism: Dysregulation of the sleep-wake cycle, circadian rhythm, or NREM/REM boundaries and loss of orexin in type 1 narcolepsy.

Syndromes:

Insomnia - manifested by difficulty falling asleep, frequent awakenings, or early morning awakening

Hypersomnia - leads to excessive daytime sleepiness

Parasomnias - represent abnormal manifestations during sleep, such as sleepwalking or REM sleep behavior disorder (RBD)

Circadian disorders - delayed phase (youth), early awakening (seniors), jet lag.

Obstructive sleep apnea (OSA) - snoring, apnea, non-restorative sleep, daytime sleepiness.

Red flags: RBD (may precede synucleinopathy), cataplexy with daytime sleepiness (narcolepsy 1), stereotyped nocturnal hypermotor episodes (sleep-related epilepsy!), hypersomnia with focal neurological signs (MS, tumor). Suddenly developing excessive sleepiness may indicate metabolic or structural brain damage.

Examination: Sleep history (diary), daytime sleepiness scales, initially laboratory tests (metabolic screening, infection), imaging in case of neurological deficit (acutely CT, if negative early MRI), video-polysomnography, eventually video-EEG monitoring, actigraphy (tracking patient activity).

Treatment: According to the cause:

Insomnia - cognitive behavioral therapy, pharmacotherapy only in second line

OSA - CPAP + weight loss, tonsillectomy in children

RLS - iron correction → gabapentinoids / dopaminergic agonists

RBD - Melatonin or clonazepam + safe environment

Narcolepsy - Behavioral measures + stimulants, SSRIs/SNRIs, oxybates

Circadian disorders - bright light (morning vs. evening), melatonin, regular routine.

Onset	Children	Adults
Acute	adjustment insomnia, night terrors with fever/stress	acute insomnia, medications, shift work, jet lag
Subacute	behavioral insomnia, sleepwalking, RLS	depression/anxiety, RLS, circadian disorders (frequent), RLS (frequent)
Chronic	narcolepsy, OSA (1-5%), chronic parasomnias (very common)	OSA (frequent with overweight), chronic insomnia, narcolepsy (rare), idiopathic hypersomnia, RBD

Explanatory notes: CPAP - continuous positive airway pressure, RLS - restless legs syndrome, MS - multiple sclerosis, SSRI - selective serotonin reuptake inhibitors, SNRI - serotonin- norepinephrine reuptake inhibitors.